

Datasheet for ABIN685447
anti-DDIT3 antibody (AA 75-168)[Go to Product page](#)

1 Image

2 Publications

Overview

Quantity:	100 µL
Target:	DDIT3
Binding Specificity:	AA 75-168
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DDIT3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human DDIT3
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

Target Details

Target:	DDIT3
Alternative Name:	GADD153/DDIT3 (DDIT3 Products)

Target Details

Background:	<p>Synonyms: CHOP, CEBPZ, CHOP1, CHOP-1, GADD153, DNA damage-inducible transcript 3 protein, DDIT-3, C/EBP zeta, C/EBP-homologous protein, C/EBP-homologous protein 1, CCAAT/enhancer-binding protein homologous protein, Growth arrest and DNA damage-inducible protein GADD153, DDIT3</p> <p>Background: Multifunctional transcription factor in ER stress response. Plays an essential role in the response to a wide variety of cell stresses and induces cell cycle arrest and apoptosis in response to ER stress. Plays a dual role both as an inhibitor of CCAAT/enhancer-binding protein (C/EBP) function and as an activator of other genes. Acts as a dominant-negative regulator of C/EBP-induced transcription: dimerizes with members of the C/EBP family, impairs their association with C/EBP binding sites in the promoter regions, and inhibits the expression of C/EBP regulated genes. Positively regulates the transcription of TRIB3, IL6, IL8, IL23, TNFRSF1B/DR5, PPP1R15A/GADD34, BBC3/PUMA, BCL2L11/BIM and ERO1L. Negatively regulates, expression of BCL2 and MYOD1, ATF4-dependent transcriptional activation of asparagine synthetase (ASNS), CEBPA-dependent transcriptional activation of hepcidin (HAMP) and CEBPB-mediated expression of peroxisome proliferator-activated receptor gamma (PPARG). Inhibits the canonical Wnt signaling pathway by binding to TCF7L2/TCF4, impairing its DNA-binding properties and repressing its transcriptional activity. Plays a regulatory role in the inflammatory response through the induction of caspase-11 (CASP4/CASP11) which induces the activation of caspase-1 (CASP1) and both these caspases increase the activation of pro-IL1B to mature IL1B which is involved in the inflammatory response.</p>
Gene ID:	1649
UniProt:	P35638
Pathways:	Regulation of Muscle Cell Differentiation , ER-Nucleus Signaling , Skeletal Muscle Fiber Development , Cell RedoxHomeostasis

Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	FCM 1:20-100
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

Application Details

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: 4 °C, -20 °C

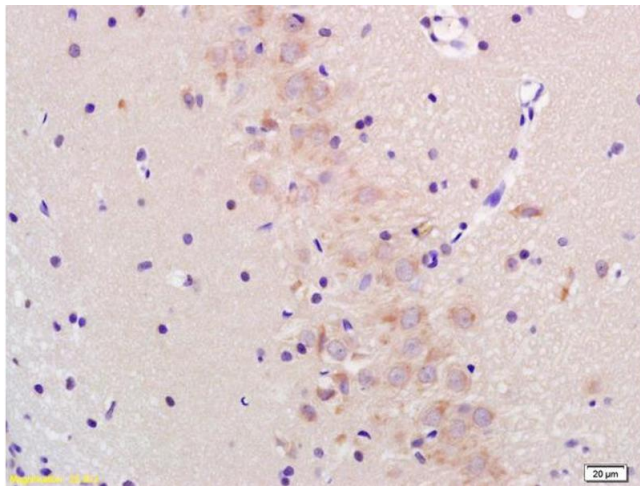
Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

Publications

Product cited in: Ding, Zou, Li, Tian, Abdelalim, Du, She, Wang, Tan, Wang, Chen, Lv, Chang: "Study of histopathological and molecular changes of rat kidney under simulated weightlessness and resistance training protective effect." in: **PLoS ONE**, Vol. 6, Issue 5, pp. e20008, (2011) ([PubMed](#)).

Du, Zhou, Jia, Huang: "SelK is a novel ER stress-regulated protein and protects HepG2 cells from ER stress agent-induced apoptosis." in: **Archives of biochemistry and biophysics**, Vol. 502, Issue 2, pp. 137-43, (2010) ([PubMed](#)).



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded rat brain labeled with Anti-GADD153 Polyclonal Antibody, Unconjugated (ABIN685447) at 1:200 followed by conjugation to the secondary antibody and DAB staining.